

# AUTHOR INDEX 1989 Volume 23

## A

- ABE S *see* HAYAKAWA T *et al*  
 ABE T *see* USUI A *et al*  
 ABRAMS L S M *see* PETERS N S *et al*  
 ACAD B-A and WEISS H R Increased myocardial microvascular utilisation and flow during atrial pacing, 1027  
 ADOMAIN G E *see* FRENCH W J *et al*  
 AGUIRREGOICA V, KEARNEY J N, DAVIS G A, and GOWLAND G Effects of antifungals on the viability of heart valve cusp derived fibroblasts, 1058  
 AKUTSU T *see* NISHIMURA T *et al*  
 ALLEN D G *see* LEE J A and ALLEN D G  
 ALLEN M J, GILMOUR S M, SINGER M, and BENNETT E D Effects of atrial natriuretic peptide on systemic haemodynamics and cardiac function in normal man, 70  
 AMEMIYA H *see* NISHIMURA T *et al*  
 AMOORE J N and SANTAMORE W P Model studies of the contribution of ventricular interdependence to the transient changes in ventricular function with respiratory efforts, 683  
 ANGELL S K *see* FANN J I *et al*  
 ANGELL-JAMES J E, CLARKE J A, DE BURGH DALY M, and TATON A Carotid chemoreceptor function and structure in the atherosclerotic rabbit: respiratory and cardiovascular responses to hyperoxia, hypoxia and hypercapnia, 541  
 ANNO T *see* KODAMA I *et al*  
 ANTILA K *see* LINDQVIST A *et al*  
 ARITA M *see* NAKAMURA S *et al*  
 ARMSTRONG M L *see* LOPEZ J A G *et al*  
 ARMSTRONG P *see* FORSTER C *et al*  
 ASTRAS G *see* CHAMBERS D J *et al*  
 AVERILL W *see* FRENCH W J *et al*

## B

- BAGBY S P and HOLDEN W E An in vitro system for study of effects of angiotensin I on cultured endothelial cells, 279  
 BAIN R J I, TAN L B, MURRAY R G, DAVIES M K, and LITTLER W A Central haemodynamic changes during lower body positive pressure in patients with congestive cardiac failure, 833  
 BAKER P B *see* FOREMAN D W *et al*  
 BALASHOV S A *see* MELKUMYANTS A M *et al*  
 BANNER N R, PATEL N, COX A P, PATTON H E, LACHNO D R, and YACOB M H Altered sympathoadrenal response to dynamic exercise in cardiac transplant recipients, 965  
 BARRATT-BOYES B G *see* MAXWELL L, *et al*  
 BATEMAN N T *see* BAUDOUIN S V and BATEMAN N T  
 BAUDOUIN S V and BATEMAN N T The effect of noradrenaline on the ability of rat papillary muscle to resist an acute respiratory acidosis, 607  
 BAUMAN J L *see* HARIMAN R J *et al*  
 BECH O M, KAHR O, DIAMANT B, and STEINER E Time course of functional deterioration after coronary artery ligation in rats, 649  
 BECKER B F *see* TERRES W *et al*  
 BECKMAN K J *see* HARIMAN R J *et al*  
 BELCH J J *see* SANIABADI A R *et al*  
 BELLONI F L, BROWN I, and HINTZE T H Mechanism of the apparent parasympathetic inhibition of adenosine induced heart rate slowing in the dog, 239  
 BENNETT E D *see* ALLEN M J *et al*  
 BERKENBOOM G, UNGER P, FANG Z Y, DEGRE S, and FONTAINE J Comparison of responses to acetylcholine and serotonin on isolated canine and human coronary arteries, 780  
 BERNAUER W *see* METZ V and BERNAUER W

- BESTETTI R B and PINTO L Z The surface electrocardiogram as a means of refining a murine pressure overload model of congestive heart failure: correspondence, 560  
 BHATIA M L *see* TALWAR K K *et al*  
 BIESEBEEK J D *see* TE BIESEBEEK J D  
 BINZ K-H *see* PODZUWEIT T *et al*  
 BISERA J *see* VON PLANTA M *et al*  
 BJÖRNERHEIM R, GOLF S, and HANSSON V Apparent lack of beta<sub>2</sub> adrenergic receptors in porcine myocardium, 577  
 BLACK M M *see* CHAMBERS J B *et al*  
 BLUMENFELD O O *see* EGHBALI M *et al*  
 BOLLINGER A *see* JÄGER K *et al*  
 BOUGHNER D R *see* CANHAM P B *et al*  
 BOYES B G BARRATT- *see* BARRATT-BOYES B G  
 BRAIMBRIDGE M V *see* CHAMBERS D J *et al*  
 BRANZI G *see* CIULLA M *et al*  
 MAGRINI F *et al*  
 BRAQUET P *see* TOSAKI A *et al*  
 BRENDEN W *see* HOBBAHN J *et al*  
 BRIL A and MAN R Y K The role of potassium and sodium-calcium exchange currents in the action potential durations of normal Purkinje fibres and Purkinje fibres surviving infarction, 410  
 BRISTOW J D *see* RAJAGOPALAN B *et al*  
 BROEK A J C M Van *see* VAN DEN BROEK A J C M  
 BROWN B P *see* LOPEZ J A G *et al*  
 BROWN I *see* BELLONI F L *et al*  
 BRUNEVAL P *see* CAPRON L and BRUNEVAL P  
 BRUNO S *see* VON PLANTA M *et al*  
 BRUSCHKE A V G *see* MOHANLAL R W *et al*  
 BURGH DALY M De *see* BURGH DALY M  
 BURKHOF D *see* FRANZ M R *et al*

## C

- CAHILL P D *see* FANN J I *et al*  
 CAI N *see* OLSSON S B *et al*  
 CAMM A J *see* MALIK M and CAMM A J  
 CANHAM P B, FINLAY H M, DIXON J G, BOUGHNER D R, and CHEN A Measurements from light and polarised light microscopy of human coronary arteries fixed at distending pressure, 973  
 CANNON N J *see* DUFF H J *et al*  
 CAPRON L and BRUNEVAL P Influence of applied stress on mitotic response of arteries to injury with a balloon catheter: quantitative study in rat thoracic aorta, 941  
 CARR D B *see* SAINI V *et al*  
 CARROLL E P, JANICKI J S, PICK R, and WEBER K T Myocardial stiffness and reparative fibrosis following coronary embolisation in the rat, 655  
 CARROLL P J *see* VINTEN-JOHANSEN J *et al*  
 CARTER G and GAVIN J B Endocardial injury and the pathogenesis of mural thrombosis in the left ventricle, 478  
 CARTER S *see* FORSTER C *et al*  
 CAUCHY M J *see* DESJARDINS S *et al*  
 CECONI C, CONDORELLI E, QUINZANI M, RODELLA A, FERRARI R, and HARRIS P Noradrenaline, atrial natriuretic peptide, bombesin and neurotensin in myocardium and blood of rats in congestive cardiac failure, 674  
 CEDRO K HERBACZYŃSKA *see* HERBACZYŃSKA-CEDRO K  
 CHAMBERS D J, ASTRAS G, TAKAHASHI A, MANNING A S, BRAIMBRIDGE M V, and HEARSE D J Free radicals and cardioplegia: organic anti-oxidants as additives to the St Thomas' Hospital cardioplegic solution, 351

- CHAMBERS J B, COCHRANE T, BLACK M M, and JACKSON G The effect of flow on Doppler estimates of bioprosthetic mitral valve function in vitro, 1007
- CHANG L S *see* YOUNG S T *et al*
- CHARLON V *see* THOLLON C *et al*
- CHEN A *see* CANHAM P B *et al*
- CHIANTELLA V *see* VINTEN-JOHANSEN J *et al*
- CHONG E M F *see* MANLEY B S *et al*
- CHRISTY J R E MACLEOD N The role of stasis in the clotting of blood and milk flows around solid objects, 949
- CIULLA M, MEAZZA R, ROBERTS N, BRANZI G, and MAGRINI F A percutaneous approach to cardiac haemodynamics in anaesthetised rats, 21
- *see also* MAGRINI F *et al*
- CLARKE J A *see* ANGELL-JAMES J E *et al*
- COBBE S M *see* MANLEY B S *et al*
- COCHRANE T *see* CHAMBERS J B *et al*
- COLLIER J *see* VALLANCE P *et al*
- CONDORELLI E *see* CECONI C *et al*
- CONZEN P F M *see* HOBBAHN J *et al*
- CORABOEUF E *see* LAURIBE P *et al*
- CORDELL A R *see* VINTEN-JOHANSEN J *et al*
- COUMANS W A *see* VAN DER VEEN F H *et al*
- COX A P *see* BANNER N R *et al*
- CROME R *see* MANNING A S *et al*
- CROZATIER B *see* GILSON N *et al*
- CUERVO L A *see* MURPHY P C *et al*
- CUMMING D V E *see* PATTISON C W *et al*
- CUNNINGHAM D *see* GIBBS J S R *et al*
- CZARNECKI W *see* DE JONG J W *et al*

## D

- DALY M DE BURGH *see* DE BURGH DALY M
- DANG H S *see* VALIATHAN M S *et al*
- DAVIES G S *see* AGUIRREGOICA V *et al*
- DAVIES M K *see* BAIN R J I *et al*
- DAWSON J M and HUDLICKÁ O The effects of long term administration of prazosin on the microcirculation in skeletal muscles, 913
- DE BURGH DALY M *see* ANGELL-JAMES J E *et al*
- DE JONG J W, CZARNECKI W, RUZYLO W, HUIZER T, and HERBACZYŃSKA-CEDRO K Apparent inosine uptake by the human heart, 484
- *see also* VEMURI R *et al*
- DEAN J W and LAB M J Effect of changes in load on monophasic action potential and segment length of pig heart in situ, 887
- DEGRE S *see* BERKENBOOM G *et al*
- DEN BROEK A J C M VAN *see* VAN DEN BROEK A J C M
- DER LAARSE A VAN *see* VAN DER LAARSE A
- DER NAGEL T VAN *see* VAN DER NAGEL T
- DER NAT K H VAN *see* VAN DER NAT K H
- DER VALK E J M VAN *see* VAN DER VALK E J M
- DER VALK L VAN *see* VAN DER VALK L
- DER VEEN F H VAN *see* VAN DER VEEN F H
- DER VUSSE G J *see* VAN DER VUSSE G J
- DER WALT J J VAN *see* VAN DER WALT J J
- DER WOUW P A VAN *see* VAN DER WOUW P A
- DESJARDINS S, MUELLER R W, and CAUCHY M J The surface electrocardiogram as a means of refining a murine pressure overload model of congestive heart failure: correspondence reply 560
- — and CAUCHY M J Effects of milrinone treatment in cardiomyopathic hamsters (CHF 147) with severe congestive heart failure, 620
- DIAKOS A *see* SIDERIS D A *et al*
- DIAMANT B *see* BECH O M *et al*
- DIXON J G *see* CANHAM P B *et al*
- DONCK L VER *see* VER DONCK L
- DOWNEY J M *see* MAXWELL M P *et al*

- DU PLOOY W J and SCHUTTE P J Compilation of regression equations employing the RR interval for the correction of systolic time interval measurements for heart rate in sheep, 359
- DUFF H J, CANNON N J, and SHELTON R S Mexiletine-quinidine in isolated hearts: an interaction involving the sodium channel, 584
- DUFFY A *see* PAPADOPULOS-ELEOPULOS E *et al*
- DUNN M J *see* PATTISON C W *et al*
- DURANTE W, SUNAHARA F A, and SEN A K Effect of diabetes on metabolic coronary dilatation in the rat, 40
- DYMOND D S *see* PETERS N S *et al*

## E

- EAPEN J T *see* VALIATHAN M S *et al*
- ECONOMIDES A P *see* MANLEY B S *et al*
- EDVARDSSON N *see* OLSSON S B *et al*
- EFSEN F *see* SVENDSEN J H *et al*
- EGAS J M *see* VAN DER LAARSE A *et al*
- EGHBALI M, EGBALI M, ROBINSON T F, SEIFTER S, and BLUMENFELD O O Collagen accumulation in heart ventricles as a function of growth and aging, 723
- *see also* EGBALI M *et al*
- EL-SHERIF N *see* GOUGH W B and EL-SHERIF N HARIMAN R J *et al*
- ELEOPULOS E PAPADOPULOS- *see* PAPADOPULOS-ELEOPULOS E
- ESCANDE D *see* LAURIBE P *et al*
- ESTAFANOUS G F *see* KOBAYASHI H *et al*

## F

- FAGBEMI S O *see* ZEITLIN I J *et al*
- FANG Z Y *see* BERKENBOOM G *et al*
- FANN J I, ANGELL S K, CAHILL P D, KOSEK J C, and MILLER D C Effects of fish oil on arteriosclerosis in the Japanese quail, 631
- FERRARI R *see* CECONI C *et al*
- FINLAY H M *see* CANHAM P B *et al*
- FLAIG W *see* PODZUWEIT T *et al*
- FLAMENG W *see* VAN DER VEEN F H *et al*
- FONTAINE J *see* BERKENBOOM G *et al*
- FORBES C D *see* SANIABADI A R *et al*
- FOREMAN D W, MITCHELL J C, and BAKER P B Physical chemical evidence of structural weakness in coronary arterial calcification, 64
- FORSTER C, CARTER S, and ARMSTRONG P Vascular smooth muscle responsiveness to noradrenaline and phenylephrine following experimental heart failure in dogs, 489
- FOUAD-TARAZI F M *see* HORI K *et al*
- KOBAYASHI H *et al*
- FOX K M *see* GIBBS J S R *et al*
- FOX R A *see* PAPADOPULOS-ELEOPULOS *et al*
- FRANZ M R, BURKHOF D, YUE D T, and SAGAWA K Mechanically induced action potential changes and arrhythmia in isolated and in situ canine hearts, 213
- FRASIER-SCOTT K *see* TIPNIS U R *et al*
- FREDERICK L G, McDONALD S J, and GARTHWAITE S M Cardiovascular profile of a new anti-arrhythmic agent, SC-40230, 897
- FRENCH W J, GARNER D, ADOMIAN G E, AVERILL W, LAKS M M Verapamil induced ventricular hypertrophy in conscious dogs, 695
- FUJI H *see* KUZUYA T *et al*
- FUJITA T *see* NISHIMURA T *et al*
- FUKUMOTO T *see* HAYAKAWA T *et al*

## G

- GARNER D *see* FRENCH W J *et al*
- GARTHWAITE S M *see* FREDERICK L G *et al*
- GAVIN J B *see* CARTER G and GAVIN J B MAXWELL L *et al*

- GEERTS H, NUYDENS R, NUYENS R, and VER DONCK L The effect of flunarizine on intracellular calcium in isolated rat cardiomyocytes: A digital image processing study, 797
- GERLACH E *see* TERRES W *et al*
- GIBBS J S R, CUNNINGHAM D, SPARROW J, POOLE-WILSON P A, and FOX K M Unpredictable zero drift in intravascular micromanometer tipped catheters during long term pulmonary artery pressure recording: implications for catheter design, 152
- GIBSON J K *see* HOLZGREFE H H and GIBSON J K
- GILMER L *see* HU J-F *et al*
- GILMOUR S M *see* ALLEN M J *et al*
- GILSON N, CROZATIER B, and LAPLACE M Left ventricular pressure-diameter relations in the conscious rabbit, 7
- GOETZ A *see* HOBBAHN J *et al*
- GOLDMAN S *see* LANCASTER L D *et al*
- GOLDSPINK G *see* PATTISON C W *et al*
- GOLF S *see* BJÖRNERHEIM R *et al*
- GOMES J A C *see* HARIMAN R J *et al*
- GONDSCHOR P *see* HOBBAHN J *et al*
- GONZALEZ M D and VASSALLE M Electrical and mechanical effects of strontium in sheep cardiac Purkinje fibres, 867
- GORDEY J *see* RAYMOND R M and GORDEY J
- GORDON-MAJSZAK W *see* HERBACZYŃSKA-CEDRO K and GORDON-MAJSZAK W
- GOUGH W B and EL-SHERIF N The differential response of normal and ischaemic Purkinje fibres to clofilium, d-sotalol and bretylium, 554
- GOWLAND G *see* AGUIRREGOICA V *et al*
- GUAZZI M D *see* MORUZZI P *et al*

H

- HAMERS S *see* VAN DER LAARSE A *et al*
- HANSSON V *see* BJÖRNERHEIM R *et al*
- HARAOKA S *see* HINA K *et al*
- HARIMAN R J, HU D, BECKMAN K J, GOMES J A C, BAUMAN J L, and EL-SHERIF N Cryothermal mapping of the sinus node in dogs: a simple method of localising dominant and latent pacemakers, 231
- *see also* LOUIE E K *et al*
- HARRIS P *see* CECONI C *et al*
- HASHIMOTO H *see* MATSUI Y *et al*
- HAUSNØ S *see* SVENDSEN J H *et al*
- HAYAKAWA T, NAGAMOTO Y, NINOMIYA K, ABE S, FUKUMOTO T, and KUROIWA A Effects of heart rate and diltiazem hydrochloride on alternans of ST segment elevation and ventricular arrhythmia during acute myocardial ischaemia in dogs, 520
- HAYASHI H, MIYATA H, WATANABE H, KOBAYASHI A, and YAMAZAKI N Effects of hydrogen peroxide on action potentials and intracellular  $Ca^{2+}$  concentration of guinea pig heart, 767
- *see also* MIYATA H *et al*
- SAKAKA K, *et al*
- HAYASHI H *see* SAKATA K *et al*
- HAYASHI J *see* TAKEDA K *et al*
- HEALEY B P *see* WICKER P A and HEALEY B P
- HEARSE D J *see* CHAMBERS D J *et al*
- MANNING A S *et al*
- MAXWELL M P *et al*
- RIVA E and HEARSE D J
- HEGGE J A J *see* VEMURI R *et al*
- HEISTAD D D *see* LOPEZ J A G *et al*
- HELLER M *see* VEMURI R *et al*
- HERBACZYŃSKA-CEDRO K and GORDON-MAJSZAK W Evidence for increased lipid peroxidation in the non-ischaemic portion of the heart with coronary occlusion, 98
- *see also* DE JONG J W *et al*
- HIEDA N *see* OGAWA T *et al*
- HILL T *see* PRIELIPP R C *et al*

- HINA K, WATANABE H, UEDA M, YAMADA N, SAITO D, HARAOKA S, TSUI T, and KUSACHI S Forskolin potentiates myocardial reactive hyperaemia in the open chest dog: the contribution of adenylate cyclase, 104
- HINTZE T H *see* BELLONI F L *et al*
- HIRATA M *see* TAKEDA K *et al*
- HOBBAHN J, CONZEN P F M, GOETZ A, SEIDL G, GONDSCHOR P, BRENDL W, and PETER K Myocardial surface  $PO_2$  — an indicator of myocardial tissue oxygenation? 529
- HOLDEN W E *see* BAGBY S P and HOLDEN W E
- HOLLAAR L *see* VAN DER LAARSE A *et al*
- HOLZGREFE H H and GIBSON J K Beneficial effects of oxypurinol pretreatment in stunned, reperfused canine myocardium, 340
- HOPKINS R *see* HU J-F *et al*
- HORI K, MIRSKY I and FOUDAT-TARAZI F M Effects of chronic sodium depletion on function of isolated normal and hypertensive hypertrophied rat heart, 432
- HORI M, KORETSUNE Y, KAGIYA T, WATANABE Y, IWAKURA K, IWAI K, KITABATAKE A, YOSHIDA H, INOUE M and KAMADA T An increase in myocardial beta-adrenoceptors to compensate for postischaemic dysfunction following coronary micro-embolisation in dogs, 424
- *see also* TAMAI J *et al*
- HOSHIDA S *see* KUZUYA T *et al*
- HOSOKAWA M *see* SAKAI T *et al*
- HU D *see* HARIMAN R J *et al*
- HU J-F, GILMER L, HOPKINS R, and WOLFINBARGER L Effects of antibiotics on cellular viability in porcine heart valve tissue, 960
- HUBERT R S *see* DESJARDINS S *et al*
- HUDLICKÁ O *see* DAWSON J M and HUDLICKÁ O
- HUGHSON R L *see* MURPHY P C *et al*
- HUIZER T *see* DE JONG J W *et al*
- VEMURI R *et al*
- HUNT J A *see* LUTY J *et al*
- HUNTER T *see* WU K-M *et al*

I

- IMAI S *see* ISHIBASHI T *et al*
- INOUE M *see* HORI M *et al*
- TAMAI J *et al*
- ISHIBASHI T, NAKAZAWA M, and IMAI S Effect of MCI-176, a new calcium channel blocker, on large and small coronary arteries in dogs, 295
- ITO T *see* OGAWA T *et al*
- MATSUI Y *et al*
- ITOH H *see* TAKEDA K *et al*
- IWAI K *see* HORI M *et al*
- TAMAI J *et al*
- IWAKURA K *see* HORI M *et al*
- TAMAI J *et al*

J

- JACKSON G *see* CHAMBERS J B *et al*
- JÄGER K, SEIFERT H, and BOLLINGER A M-mode echocardiography: a new technique for the evaluation of venous wall and valve motion, 25
- JAMALL I S *see* SIMMONS T W and JAMALL I S
- JAMES J E ANGELL- *see* ANGELL-JAMES J E
- JANICKI J S *see* CARROLL E P *et al*
- JANSSON E *see* LIN L *et al*
- JOHANSEN J VINTEN- *see* VINTEN-JOHANSEN J
- JOHNSTON W E *see* VINTEN-JOHANSEN J *et al*
- JONES D G C *see* PATTISON C W *et al*
- JONG J W De *see* DE JONG J W
- JONZON B, SYLVÉN C, and KAUSER L Theophylline decreases pain in the ischaemic forearm test, 807
- JUHÁSZ-NAGY A *see* SOLTÍ F *et al*
- JULIAN J S *see* VINTEN-JOHANSEN J *et al*

## K

- KAGIYA T *see* HORI M *et al*  
 TAMAI J *et al*  
 KAHR O *see* BECH O M *et al*  
 KAUSER L *see* JONZON B *et al*  
 LIN L *et al*  
 KAMADA T *see* HORI M *et al*  
 KUZUYA T *et al*  
 TAMAI J *et al*  
 KARTHA C C *see* VALIATHAN M S *et al*  
 KATO K *see* USUI A *et al*  
 KAWAGUCHI H *see* TAKAHASHI K *et al*  
 KAWASAKI S *see* TAKEDA K *et al*  
 KEARNEY J N *see* AGUIRREGOICA V *et al*  
 KEDEM J, SONN J, SCHEINOWITZ M, and WEISS H R Relationship between local oxygen consumption and local and external cardiac work: effect of tachycardia, 1043  
 KEEN M *see* LUTY J *et al*  
 KÉKESI V *see* SOLTÍ F *et al*  
 KELLY E *see* LUTY J *et al*  
 KENDREW P J *see* NIDORF S M *et al*  
 KERN K B *see* LANCASTER L D *et al*  
 KHAYUTIN V M *see* MELKUMYANTS A M *et al*  
 KIM Y *see* KUZUYA T *et al*  
 KITABATAKE A *see* HORI M *et al*  
 KUZUYA T *et al*  
 MASUYAMA T *et al*  
 TAMAI J *et al*  
 KIYOSUE T *see* NAKAMURA S *et al*  
 KLEIN N *see* MANNING A S *et al*  
 KNUCKEY N W *see* PAPADOPULOS-ELEOPULOS E *et al*  
 KOBAYASHI A *see* HAYASHI H *et al*  
 MIYATA H *et al*  
 SAKATA K *et al*  
 KOBAYASHI H, SMITH C E, FOUAD-TARAZI F M, WICKER P, and ESTAFANOUS G F Circulatory effects of acute normovolaemic haemodilution in rats with healed myocardial infarction, 842  
 KODAMA I, ANNO T, SUDO Y, SATAKE N and SHIBATA S Electrophysiological effects of FK664, a new cardiotonic agent, on preparations from guinea pig ventricle and from rabbit sino-atrial node, 369  
 KODAMA K *see* MASUYAMA T *et al*  
 KOLARI P *see* LINDQVIST A *et al*  
 KOLTAI M *see* TOSAKI A *et al*  
 KORETSUNE Y *see* HORI M *et al*  
 KOSEK J C *see* FANN J I *et al*  
 KOSTIS E B *see* SIDERIS D A *et al*  
 KOVACS I B *see* PETERS N S *et al*  
 KOYANAGI S *see* TOMOIKE H *et al*  
 KREHER P *see* THOLLON C *et al*  
 KRUGER R T *see* VAN DER VEEN F H *et al*  
 KRUKENKAMP I *see* LOUIE E K *et al*  
 KUO T S *see* YOUNG S T *et al*  
 KUROIWA A *see* HAYAKAWA T *et al*  
 KUSACHI S *see* HINA K *et al*  
 KUZUYA T, HOSHIDA S, NISHIDA M, KIM Y, FUJI H, KITABATAKE A, KAMADA T, and TADA M Role of free radicals and neutrophils in canine myocardial reperfusion injury: myocardial salvage by a novel free radical scavenger, 2-octadecylascorbic acid, 323

## L

- LAARSE A VAN DER *see* VAN DER LAARSE A  
 LAB M J *see* DEAN J W and LAB M J  
 LACHNO D R *see* BANNER N R *et al*  
 LAITINEN L A *see* LINDQVIST A *et al*  
 LAKS M M *see* FRENCH W J *et al*

- LANCASTER L D, KERN K B, MORRISON D A, OLAJOS M, and GOLDMAN S Changes in right ventricular relaxation during acute anterior myocardial infarction in pigs, 46  
 LAPLACE M *see* GILSON N *et al*  
 LAURIBE P, ESCANDE D, NOTTIN R, and CORABOEUF E Electrical activity of human atrial fibres at frequencies corresponding to atrial flutter, 159  
 LEE J A and ALLEN D G Comparison of the effects of inotropic interventions on isometric tension and shortening in isolated ferret ventricular muscle, 748  
 LEVITSKY S *see* LOUIE E K *et al*  
 LIMBRUNO U *see* ZUCCHI R *et al*  
 LIN L, SYLVÉN C, SOTONYI P, SOMOGYI E, KAUSER L, and JANSSON E Lactate dehydrogenase and its isoenzyme activities in different parts of the normal human heart, 601  
 LINDQVIST A, PARVIAINEN P, KOLARI P, TUOMINEN J, VÄLIMÄKI I, ANTILA K, and LAITINEN L A A non-invasive method for testing neural circulatory control in man, 262  
 LITTLE W C *see* VINTEN-JOHANSEN J *et al*  
 LITTLER W A *see* BAIN R J I *et al*  
 LOMBARDI F, RUSCONI T G, and MALLIANI A Premature ventricular contractions and reflex sympathetic activation in cats, 205  
 LOPEZ J A G, BROWN B P, ARMSTRONG M L, PIEGORS D J, and HEISTAD D D Response of the mesenteric circulation to serotonin in normal and atherosclerotic monkeys: implications for the pathogenesis of non-occlusive intestinal ischaemia, 117  
 LORTET S and ZIMMER H-G Functional and metabolic effects of ribose in combination with prazosin, verapamil and metoprolol in rats *in vivo*, 702  
 LOUIE E K, KRUKENKAMP I, HARIMAN R J, and LEVITSKY S Quantitative assessment of aortic regurgitation by colour flow Doppler in an open chest canine model, 145  
 LOWE G D *see* SANIABADI A R *et al*  
 LUTY J, HUNT J A, NOBBS P K, KELLY E, KEEN M, and MACDERMOT J Expression and desensitisation of A<sub>2</sub> purinoceptors on cultured bovine aortic endothelial cells, 303

## M

- MACDERMOT J *see* LUTY J *et al*  
 MCEWAN J R *et al*  
 McDONALD S J *see* FREDERICK L G *et al*  
 MCEWAN J R, RITTER J M, and MACDERMOT J Calcitonin gene related peptide (CGRP) activates adenylate cyclase of bovine aortic endothelial cells: guanosine 5' triphosphate dependence and partial agonist activity of a tyrosinated analogue, 921  
 MACLEOD N *see* CHRISTY J R E and MACLEOD N  
 MAGRINI F, ROBERTS N, BRANZI G, MONDADORI C, REGGIANI P, MEAZZA R and CIULLA M Cardiac responses to head up tilt during early extrauterine life: relevance of active acquisition of erect posture, 460  
 — *see also* CIULLA M *et al*  
 MAGUIRE M E *see* MANNING A S *et al*  
 MAJSZAK W GORDON- *see* GORDON-MAJSZAK W  
 MALIK M and CAMM A J Computer simulation of myocardial fibrillation using a one dimensional model of excitation and recovery processes, 132  
 MALLIANI A *see* LOMBARDI F *et al*  
 MAN R Y K *see* BRIL A and MAN R Y K  
 MANABE H *see* NISHIMURA T *et al*  
 MANLEY B S, CHONG E M F, WALTON C, ECONOMIDES A P, and COBBE S M An animal model for the chronic study of ventricular repolarisation and refractory period, 16  
 MANNING A S, CROME R, KLEIN N, HEARSE D J, and MAGUIRE M E Dissociation between reperfusion induced arrhythmias and increases in ventricular alpha<sub>1</sub> receptor density in the anaesthetised rat, 852  
 — *see also* CHAMBERS D J *et al*  
 MARIANI M *see* ZUCCHI R *et al*

- MASUYAMA T, KODAMA K, NAKATANI S, and KITABATAKE A Effects of atrioventricular interval on left ventricular diastolic filling assessed with pulsed Doppler echocardiography, 1034
- MATSUI Y, HASHIMOTO H, TSUKAMOTO H, OKUMURA K, ITO T, OGAWA K, and SAKATA T Disappearance and appearance of isoenzymes of creatine kinase, lactate dehydrogenase and aspartate aminotransferase in the myocardium undergoing infarction, 249
- MAUVE I *see* MOHANLAL R W *et al*
- MAXWELL L, GAVIN J B, and BARRATT-BOYES B G Uneven host tissue ongrowth and tissue detachment in stent mounted heart valve allografts and xenografts, 709
- MAXWELL M P, HEARSE D J, YELLON D M, and DOWNEY J M Inability of chronic chemical sympathectomy to induce coronary collateral growth or development: studies in the rat heart in vivo, 820
- MEAZZA R *see* CIULLA M *et al*
- MAGRINI F *et al*
- MELKUMYANTS A M, BALASHOV S A, and KHAYUTIN V M Endothelium dependent control of arterial diameter by blood viscosity, 741
- METZ V and BERNAUER W The effect of reserpine and guanethidine on carbohydrate metabolism in ischaemic rat myocardium, 385
- MILLER D C *see* FANN J I *et al*
- MINAKAMI S *see* NAKANO E *et al*
- MIRSKY I *see* HORI K *et al*
- MITCHELL J C *see* FOREMAN D W *et al*
- MIYATA H, HAYASHI H, KOBAYASHI A, and YAMAZAKI N Effects of strophantin on intracellular  $Ca^{2+}$  concentration and cellular morphology of guinea pig myocytes, 378
- *see also* HAYASHI H *et al*
- MIYAZAKI T *see* SAKAI T *et al*
- MOHANLAL R W, MAUVE I, VAN DER VALK L, BRUSCHKE A V G, and VAN DER LAARSE A Delayed recovery of homogeneous perfusion distribution in isolated rat heart after vasodilatation induced by  $\alpha_1$  adrenoceptor blockade during postischaemic reperfusion, 934
- MONCADA S *see* VALLANCE P *et al*
- MONDADORI C *see* MAGRINI F *et al*
- MORRISON D A *see* LANCASTER L D *et al*
- MORUZZI P, SGANZERLA P, and GUZZI M D Pulmonary vasoconstrictor overactivity in borderline systemic hypertension, 666
- MOULOPOULOS S D *see* SIDERIS D A *et al*
- MUELLER R W *see* DESJARDINS S *et al*
- MURASE M *see* USUI A *et al*
- MURPHY P C, CUERVO L A, and HUGHSON R L A study of cardiorespiratory dynamics with step and ramp exercise tests in normoxia and hypoxia, 825
- MURRAY R G *see* BAIN R J I *et al*
- MYERS M J *see* PETERS A M and MYERS M J

N

- NAGAMOTO Y *see* HAYAKAWA T *et al*
- NAGEL T VAN DER *see* VAN DER NAGEL T
- NAGY A JUHÁSZ- *see* JUHÁSZ-NAGY A
- NAKAGAWA M *see* TAKEDA K *et al*
- NAKAMURA M *see* TOMOIKE H *et al*
- NAKAMURA S, KIYOSUE T, and ARITA M Glucose reverses 2,4-dinitrophenol induced changes in action potentials and membrane currents of guinea pig ventricular cells via enhanced glycolysis, 286
- NAKAMURA Y *see* SAKAI T *et al*
- NAKANO E, TAKESHIGE K, TOSHIMA Y, TOKUNAGA K, and MINAKAMI S Oxidative damage in selenium deficient hearts on perfusion with adriamycin: protective role of glutathione peroxidase system, 498
- NAKATA T *see* TAKEDA K *et al*
- NAKATANI S *see* MASUYAMA T *et al*
- NAKAZAWA M *see* ISHIBASHI T *et al*

- NAT K H VAN DER *see* VAN DER NAT K H
- NATTEL S *see* NAYEBPOUR M *et al*
- NAYAR U *see* TALWAR K K *et al*
- NAYEBPOUR M, SOLYMOS B C, and NATTEL S Cardiovascular and metabolic effects of caesium chloride injection in dogs – limitations as a model for the long QT syndrome, 756
- NENNSTIEL P *see* PODZUWEIT T *et al*
- NIDORF S M, STURM M, STROPHAIR J, KENDREW P J, and TAYLOR R R Whole blood aggregation, thromboxane release and the lyso derivative of platelet activating factor in myocardial infarction and unstable angina, 273
- NINOMIYA K *see* HAYAKAWA T *et al*
- NISHIDA M *see* KUZUYA T *et al*
- NISHIMURA T, SADA M, SASAKI H, YAMADA N, YAMADA Y, YUTANI C, AMEMIYA H, FUJITA T, AKUTSU, and MANABE H Sodium nuclear magnetic resonance imaging of acute cardiac rejection in heterotopic heart transplantation, 561
- NOBBS P K *see* LUTY J *et al*
- NOTTIN R *see* LAURIBE P *et al*
- NUYDENS R *see* GEERTS H *et al*
- NUYENS R *see* GEERTS H *et al*

O

- OGAWA K *see* MATSUI Y *et al*
- OGAWA S *see* SAKAI T *et al*
- OGAWA T, SUGIYAMA S, HIEDA N, ITO T, SAKATA T and OZAWA T Biochemical and morphological changes in myocardium during coronary occlusion and reperfusion in canine hearts: effects of propranolol on myocardial damage, 417
- OGURO M *see* TAKEDA K *et al*
- OHZONO K *see* TOMOIKE H *et al*
- OKUMURA K *see* MATSUI Y *et al*
- OLAJOS M *see* LANCASTER L D *et al*
- OLSSON S B, CAI N, EDVARDSSON N, and TALWAR K K Prediction of terminal atrial myocardial repolarisation from incomplete phase 3 data, 53
- OZAWA T *see* OGAWA T *et al*

P

- PAPADOPULOS-ELEOPULOS E, KNUCKEY N W, DUFFY A, and FOX R A Importance of the redox state in vasoconstriction induced by adrenaline and serotonin, 662
- PARRATT J R *see* ZEITLIN I J *et al*
- PARVIAINEN P *see* LINDQVIST A *et al*
- PATEL N *see* BANNER N R *et al*
- PATTISON C W, CUMMING D V E, JONES D G C, GOLDSPIK G, DUNN M J, and YACOB M H Variable adaption of molecular mechanisms in relation to the use of autologous striated muscle to augment myocardial function: review, 593
- PATTON H E *see* BANNER N R *et al*
- PETER K *see* HOBBSHAHN J *et al*
- PETERS A M and MYERS M J Solute transfer into the extravascular space: comparison of two non-invasive measurement techniques, 639
- PETERS N S, ABRAMS L S M, DYMOND D S, and KOVACS I B Platelet hyperactivity and inefficient spontaneous thrombolysis in patients at high risk from an acute coronary event, 567
- PETERS T J *see* PREEDY V R and PETERS T J
- PICK R *see* CARROLL E P *et al*
- PIEGORS D J *see* LOPEZ J A G *et al*
- PINSON A *see* VEMURI R *et al*
- PINTO L Z *see* BESTETTI R B and PINTO L Z
- PLANTA I VON *see* VON PLANTA I
- PLANTA M VON *see* VON PLANTA M
- PLOOY W J Du *see* Du PLOOY W J
- PODDIGHE R *see* ZUCCHI R *et al*



- PODZWEIT T, BINZ K-H, NENNSTIEL P, and FLAIG W The anti-arrhythmic effects of myocardial ischaemia. Relation to reperfusion arrhythmias? 81
- POOLE-WILSON P A *see* GIBBS J S R *et al*
- PORSIUS A J *see* VLEEMING W *et al*
- PREDY V R and PETERS T J Synthesis of subcellular protein fractions in the rat heart in vivo in response to chronic ethanol feeding, 730
- PRIELIPP R C, HILL T, WASHBURN D, and ZALOGA G P Circulating calcium modulates adrenaline induced cyclic adenosine monophosphate production, 838
- PROAKIS A *see* WU K-M *et al*
- Q**
- QUINZANINI M *see* CECONI C *et al*
- R**
- RABKIN S W Cardiorespiratory effects of D-Ala-2-Me-Phe-4-Met-(O)-ol enkephalin in the third ventricle, and in anterior hypothalamic and paraventricular areas of the rat brain, 904
- RACKOW E C *see* VON PLANTA M *et al*
- RADDA G K *see* RAJAGOPALAN B *et al*
- RAJAGOPALAN B, BRISTOW J D, and RADDA G K Measurement of transmural distribution of phosphorus metabolites in the pig heart by  $^{31}\text{P}$  magnetic resonance spectroscopy, 1015
- RAO G S *see* TALWAR K K *et al*
- RAYMOND R M and GORDEY J The effect of hypodynamic endotoxin shock on myocardial high energy phosphates in the rat, 200
- REGGIANI P *see* MAGRINI F *et al*
- RENEMAN R S *see* VAN DER VEEN F H *et al*
- RITTER J M *see* McEWAN J R *et al*
- RIVA E and HEARSE D J Anti-arrhythmic effects of amiodarone and desethylamiodarone on malignant ventricular arrhythmias arising as a consequence of ischaemia and reperfusion in the anaesthetised rat, 331
- ROBERTS N *see* CIULLA M *et al*
- S**
- SADA M *see* NISHIMURA T *et al*
- SAGAWA K *see* FRANZ M R *et al*
- SAINI V, CARR D B, and VERRIER R L Comparative effects of the opioids fentanyl and buprenorphine on ventricular vulnerability during acute coronary artery occlusion, 1001
- SAITO D *see* HINA K *et al*
- SAKAI T, OGAWA S, HOSOKAWA M, MIYAZAKI T, SAKURAI K, and NAKAMURA Y Electrophysiological effects of flecainide in a canine 7 day old myocardial infarction model, 177
- MIYAZAKI T, HOSOKAWA M, SAKURAI K, YOSHINO H, and NAKAMURA Y Electrophysiological effects of acute ischaemia on electrically stable myocardial infarction, 169
- SAKATA K, HAYASHI H, KOBAYASHI A, and YAMAZAKI N Mechanism of arrhythmias induced by palmitoylcarnitine in guinea pig papillary muscle, 505
- SAKURAI K *see* SAKAI T *et al*
- SANIABADI A R, LOWE G D, BELCH J J, and FORBES C D Platelet aggregation inhibitory effects of the new positive inotropic agents pimobendan and UD CG 212 in whole blood, 184
- SANTAMORE W P *see* AMORE J N and SANTAMORE W P
- SASAKI H *see* NISHIMURA T *et al*
- SASAKI S *see* TAKEDA K *et al*
- SATAKE N *see* KODAMA I *et al*
- T**
- TAKAHASHI A *see* CHAMBERS D J *et al*
- TAKAHASHI K, KAWAGUCHI H, and YASUDA H The hypertensive response to vasopressor agents stimulates the release of thromboxane  $A_2$  in hypercholesterolaemic rabbits, 788
- TAKEDA K, HAYASHI J, ITOH H, HIRATA M, NAKATA T, OGURO M, KAWASAKI S, SASAKI S, and NAKAGAWA M Transection of aortic depressor never fails to raise blood pressure in spontaneously hypertensive rats, 573
- TAKESHIGE K *see* NAKANO E *et al*
- TAKEUCHI E *see* USUI A *et al*
- TALWAR K K, RAO G S, NAYAR U, and BHATIA M L Clinical significance of high frequency QRS potentials in myocardial infarction: analysis based on power spectrum of lead III, 60
- *see also* OLSSON S B *et al*

- TAMAI J, HORI M, KAGIYA T, IWAKURA K, IWAI K, KITABATAKE A, WATANABE Y, YOSHIDA H, INOUE M, and KAMADA T Role of  $\alpha_1$ -adrenoceptor activity in progression of cardiac hypertrophy in guinea pig hearts with pressure overload, 315
- TAN L B *see* BAIN R J *et al*
- TANAKA M *see* USUI A *et al*
- TARAZI F M FOUDAD *see* FOUDAD-TARAZI F M
- TATON A *see* ANGELL-JAMES J E *et al*
- TAYLOR R R *see* NIDORF S M *et al*
- TE BIESEBEEK J D *see* VLEEMING W *et al*
- TERRES W, BECKER B F, SCHRÖDL W, and GERLACH E Effects of chronic treatment with adrenaline or propranolol on platelet function and c-AMP levels in the rat, 112
- THOLLON C, KREHER P, CHARLON V, and ROSSI A Hypertrophy induced alteration of action potential and effects of the inhibition of angiotensin converting enzyme by perindopril in infarcted rat hearts, 224
- TIPNIS U R, FRASIER-SCOTT K, and SKIERA C Isoprenaline induced changes in ornithine decarboxylase activity and polyamine content in regions of the heart, 611
- TOKUNAGA K *see* NAKANO E *et al*
- TOMOIKE H, URABE Y, OHZONO K, KOYANAGI S, and NAKAMURA M Homogeneous distribution and pressure depending reduction of coronary blood flow in right ventricular free wall during coronary hypoperfusion in anaesthetised open chest dogs, 31
- TOSAKI A, KOLTAI M, and BRAQUET P Effects of low extracellular sodium concentration on reperfusion induced arrhythmias: changes in the myocardial sodium, potassium and calcium contents in isolated guinea pig heart, 993
- and SZEKERES L Possible involvement of platelet activating factor in anaphylaxis of passively sensitised, isolated guinea pig hearts, 715
- TOSHIMA Y *see* NAKANO E *et al*
- TOUMANIDIS S T *see* SIDERIS D A *et al*
- TSUIJ T *see* HINA K *et al*
- TSUKAMOTO H *see* MATSUI Y *et al*
- TUOMINEN J *see* LINDQVIST A *et al*

U

- UEEDA M *see* HINA K *et al*
- UNGER P *see* BERKENBOOM G *et al*
- URABE Y *see* TOMOIKE H *et al*
- USUI A, KATO K, ABE T, MURASE M, TANAKA M, and TAKEUCHI E Beta enolase in blood plasma during open heart surgery, 737

V

- VALENZUELA F and VASSALLE M On the mechanism of barium induced diastolic depolarisation in isolated ventricular myocytes, 390
- VALIANATHAN M S, KARTHA C C, EAPEN J T, DANG H S, and SUNTA C M A geochemical basis for endomyocardial fibrosis: rapid communication, 647
- VÄLIMÄKI J *see* LINDQVIST A *et al*
- VALK E J M VAN DER *see* VAN DER VALK E J M
- VALK L VAN DER *see* VAN DER VALK L
- VALLANCE P, COLLIER J, and MONCADA S Nitric oxide synthesised from L-arginine mediates endothelium dependent dilatation in human veins in vivo, 1053
- VAN DEN BROEK A J C M *see* VAN DER LAARSE A *et al*
- VAN DER LAARSE A, HOLLAAR L, VAN DER VALK E J M, and HAMERS S A method to quantitate cell numbers of muscle cells and non-muscle cells in homogenised heart cell cultures, 928
- Vliegen H W, VAN DER NAT K H, HOLLAAR L, EGAS J M, SWIER G P H, and VAN DEN BROEK A J C M Comparison of myocardial changes between pressure induced hypertrophy and normal growth in the rat heart, 308
- *see also* MOHANLAL R W *et al*
- VAN DER NAGEL T *see* VAN DER VEEN F H *et al*

- VAN DER NAT K H *see* VAN DER LAARSE A *et al*
- VAN DER VALK E J M *see* VAN DER LAARSE A *et al*
- VAN DER VALK L *see* MOHANLAL R W *et al*
- VAN DER VEEN F H, VAN DER VUSSE G J, FLAMENG W, COUMANS W A, and RENEMAN R S Metabolic and haemodynamic changes in the heart during the early phase of cardiopulmonary bypass: I. Clinical observations, 468
- KRUGER R T I, VAN DER NAGEL T, WILLEMSSEN P, and RENEMAN R S Metabolic and haemodynamic changes in the heart during the early phase of cardiopulmonary bypass: II. animal experiments, 472
- VAN DER VUSSE G J *see* VAN DER VEEN F H *et al*
- VAN DER WALT J J *see* VAN ROOYEN J M and VAN DER WALT J J
- VAN DER WOUW P A *see* VLEEMING W *et al*
- VAN ROOIJ H H *see* VLEEMING W *et al*
- VAN ROOYEN J M and VAN DER WALT J J The regulation of the ratio of the cardiopulmonary blood volume to stroke volume in sheep, 453
- VASSALLE M *see* GONZALEZ M D and VASSALLE M
- VALENZUELA F and VASSALLE M
- VECSEY T *see* SOLT I F *et al*
- VEEN F H VAN DER *see* VAN DER VEEN F H
- VEEMURI R, DE JONG J W, HEGGE J A J, HUIZER T, HELLER M, and PINSON A Studies on oxygen and extracellular fluid restrictions in cultured heart cells: high energy phosphate metabolism, 254
- VER DONCK L *see* GEERTS H *et al*
- VERRIER R L *see* SAINI V *et al*
- VINTEN-JOHANSEN J, CARROLL P J, JOHNSTON W E, LITTLE W C, CHIANTELLA V, JULIAN J S, and CORDELL A R Reversal of dyskinesia by increased end diastolic segment length in ischaemic-reperfused myocardium, 810
- VLEEMING W, VAN DER WOUW P A, TE BIESEBEEK J D, VAN ROOIJ H H, WEMER J, and PORSIUS A J Density of beta adrenoceptors in rat heart and lymphocytes 48 hours and 7 days after acute myocardial infarction, 859
- VLIENEN H W *see* VAN DER LAARSE A *et al*
- VON PLANTA I *see* VON PLANTA M *et al*
- VON PLANTA M, VON PLANTA I, WEIL M H, BRUNO S, BISERA J, and RACKOW E C End tidal carbon dioxide as a haemodynamic determinant of cardiopulmonary resuscitation in the rat, 364
- VUSSE G J VAN DER *see* VAN DER VUSSE G J

W

- WALT J J VAN DER *see* VAN DER WALT J J
- WALTON C *see* MANLEY B S *et al*
- WANG W K *see* YOUNG S T *et al*
- WASHBURN D *see* PRIELIPP R C *et al*
- WATANABE H *see* HAYASHI H *et al*
- HINA K *et al*
- WATANABE Y *see* HORI M *et al*
- TAMAI J *et al*
- WEIL M H *see* VON PLANTA M *et al*
- WEISS H R *see* ACAD B-A and WEISS H R
- KEDEM J *et al*
- WEMER J *see* VLEEMING W *et al*
- WICKER P *see* KOBAYASHI H *et al*
- WICKER P A and HEALY B P Variability of coronary blood flow measurements with microspheres in the rat: role of injection site and sphere number, 443
- WILLEMSSEN P *see* VAN DER VEEN F H *et al*
- WILLIAMS C A Effects of opiates during baroreceptor and ergoreceptor induced changes in blood pressure, 191
- WILSON P A POOLE *see* POOLE-WILSON P A
- WOLFINBARGER L *see* HU J-F *et al*
- WOUW P A VAN DER *see* VAN DER WOUW P A
- WU K-M, HUNTER T, and PROAKIS A Pharmacological characterization of a re-entry model for atrial tachycardia in conscious dogs, 400

## Y

- YACOUB M H *see* BANNER N R *et al*  
 PATTISON C W *et al*  
 YAMADA N *see* HINA K *et al*  
 NISHIMURA T *et al*  
 YAMADA Y *see* NISHIMURA T *et al*  
 YAMAZAKI N *see* HAYASHI *et al*  
 MIYATA H *et al*  
 SAKATA K *et al*  
 YASUDA H *see* TAKAHASHI K *et al*  
 YELLON D M *see* MAXWELL M P *et al*  
 YOSHIDA H *see* HORI M *et al*  
 TAMAI J *et al*  
 YOSHINO H *see* SAKAI T *et al*

- YOUNG S T, WANG W K, CHANG L S, and KUO T S Specific frequency properties of renal and superior mesenteric arterial beds in rats, 465

- YUE D T *see* FRANZ M R *et al*  
 YUTANI C *see* NISHIMURA T *et al*

## Z

- ZALOGA G P *see* PRIELIPP R C *et al*  
 ZEITLIN I J, FAGBEMI S O, and PARRATT J R Enzymes in normally perfused and ischaemic dog hearts which release a substance with kinin like activity, 91  
 ZIMMER H-G *see* LORTET S and ZIMMER H-G  
 ZUCCHI R, LIMBRUNO U, PODDIGHE R, MARIANI M, and RONCA G The adenosine hypothesis revisited: relationship between purine release and coronary flow in isolated rat heart, 125



# SUBJECT INDEX

## 1989 Volume 23

### A

- A<sub>2</sub> purinoceptors, expression and desensitisation on cultured bovine aortic endothelial cells, 303
- Acetylcholine and serotonin compared, effects on coronary arteries, 780
- Action potential and angiotensin converting enzyme inhibition in infarcted hearts, rat, 224
  - changes, mechanically induced, and arrhythmia, isolated and in situ canine hearts, 213
- Adenosine hypothesis, relationship between purine release and coronary flow, isolated rat heart, 125
- induced heart rate slowing, mechanism of apparent parasympathetic inhibition, dog, 239
- Adenylate cyclase activation by calcitonin gene related peptide of endothelial cells, 921
  - role in potentiation of myocardial reactive hyperaemia, open chest, dog, 104
- Adrenaline, and induction of redox state in vasoconstriction, 662
- Adriamycin toxicity and glutathione peroxidase, 498
- Aging, and collagen accumulation in heart ventricles, 723
- Alpha<sub>1</sub>-adrenoceptor activity, role in progression of cardiac hypertrophy with pressure overload, guinea pig hearts, 315
  - blockade during postischaemic reperfusion, 934
  - receptor density, and reperfusion induced arrhythmias, dissociation between, anaesthetised rat, 852
- Alternans of ST segment elevation and ventricular arrhythmia, effects of heart rate and diltiazem hydrochloride, 520
- Amiodarone and desethylamiodarone, effects on arrhythmias, 331
- Amphotericin B, effect on viable heart valve cusp derived fibroblasts, 1058
- Anaphylaxis, possible involvement of platelet activating factor, passively sensitised, isolated guinea pig hearts, 715
- Angiotensin I, effects on cultured endothelial cells, in vitro system, 279
  - converting enzyme inhibition and action potential in infarcted hearts, rat, 224
- Anti-arrhythmia activity of mexiletine-quinidine, 584
- Anti-arrhythmics, differential response of normal and ischaemic Purkinje fibres, 554
  - effects of myocardial ischaemia, 81
  - SC-40230, cardiovascular profile, 897
- Antibiotics, effects on cellular viability, porcine heart valve tissue, 960
- Antifungals, effects on viability of heart valve cusp derived fibroblasts, 1058
- Aortic depressor nerve, transection fails to raise blood pressure, spontaneously hypertensive rats, 573
  - endothelial cells, cultured bovine, A<sub>2</sub> purinoceptors, expression and desensitisation, 303
  - regurgitation, quantitative assessment by colour flow Doppler, open chest canine model, 145
  - valve allografts, detachment, 709
- Arrhythmias, atrial, effect of atrial dilatation, 882
  - effects of amiodarone and desethylamiodarone, 331
  - and mechanically induced action potential changes, isolated and in situ canine hearts, 213
  - mechanism, induced by palmitylcarnitine, guinea pig papillary muscle, 505
- Arrhythmogenic effect of high blood pressure, 983
- Arterial diameter, endothelium dependent control, by blood viscosity, 741
  - smooth muscle cells, response to injury with balloon catheter, rat thoracic aorta, 941
- Arteriosclerosis, fish oil effects, Japanese quail, 631

- Atherosclerosis, carotid chemoreceptor function and structure, rabbit, 541
  - and responses to serotonin, 117
- Atrial dilatation, effect on genesis of atrial arrhythmias, 882
  - fibres, human, electrical activity at frequencies corresponding to atrial flutter, 159
  - fibrillation during atrial monophasic action potentials, and predictions of repolarisation, 53
  - natriuretic peptide in myocardium and blood in congestive cardiac failure, rats, 674
  - — effects on systemic haemodynamics and cardiac function, normal man, 70
  - pacing, increased myocardial microvascular utilisation and flow during, 1027
  - re-entry, pharmacological characterisation, conscious dogs, 400
- Atrioventricular interval, effects on left ventricular diastolic filling assessed with pulsed Doppler echocardiography, 1034
- Autonomic circulatory control, testing, 262

### B

- Barium induced diastolic depolarisation in isolated ventricular myocytes, mechanism, 390
- Beta adrenoceptors, density, after myocardial infarction, rat heart, 859
  - — myocardial, increase during recovery from prolonged myocardial stunning, dog, 424
- Beta<sub>2</sub> adrenergic receptors, apparent lack in porcine myocardium, 577
- Blood clotting and thrombosis, role of stasis, and prosthetic heart valve, 949
  - pressure changes, effects of opiates, 191
  - — high, arrhythmogenic effect, 983
  - — in hypercholesterolaemia, 788
  - — infantile, and gravity, 460
- Bombesin in myocardium and blood in congestive cardiac failure, rats, 674
- Buprenorphine and fentanyl, compared for effects on ventricular vulnerability during acute coronary artery occlusion, 1001

### C

- Caesium induced ventricular tachycardia, mechanism, 756
- Calcitonin gene related peptide in adenylate cyclase activation of endothelial cells, 921
- Calcium channel blocker, new, MCI-176, effect on large and small coronary arteries, dogs, 295
  - modulates adrenaline induced cyclic adenosine monophosphate production, 838
- Capillary growth in skeletal muscles, effect of long term administration of prazosin, 913
  - permeability in canine myocardium, 512
- Cardiac arrest, end tidal carbon dioxide as haemodynamic determinant of successful resuscitation, rat, 364
- Cardiomyocytes, effect of flunarizine on intracellular calcium, rat, 797
- Cardioplegia, and free radicals, organic anti-oxidants as additives to St Thomas' Hospital cardioplegic solution, 351
- Cardiopulmonary blood volume to stroke volume, ratio regulation, sheep, 453
  - bypass, effects on myocardium I. Clinical observations, 468;
  - II. Animal experiments, 472
  - resuscitation, end tidal carbon dioxide as haemodynamic determinant, rat, 364

- Cardiorespiratory dynamics with step and ramp exercise tests in normoxia and hypoxia, 825  
 — effects of met-enkephalin, rat brain, 904  
 Carotid chemoreceptor function and structure, atherosclerotic rabbit, 541  
 Carpentier-Edwards mitral prostheses, function, Doppler assessment, 1007  
 Catalase in prevention of peroxidation to the heart, 774  
 Cathepsin-like activity, enzymes releasing substance with, 91  
 Cell numbers in heart cell cultures, quantitation, 928  
 Cellular viability, effects of antibiotics, porcine heart valve tissue, 960  
 Collagen accumulation in heart ventricles as function of growth and aging, 723  
 Colour flow Doppler, aortic regurgitation quantitative assessment, open chest canine model, 145  
 Computer simulation of myocardial fibrillation using one dimensional model of excitation and recovery processes, 132  
 Congestive cardiac failure, central haemodynamic changes during lower body positive pressure, 833  
 — — — noradrenaline, atrial natriuretic peptide, bombesin and neurotensin in myocardium and blood, rats, 674  
 — — — murine pressure overload model, surface electrocardiogram as means of refining: correspondence, 560  
 — — — severe, milrinone treatment, cardiomyopathic hamsters (CHF147), 620  
 Contractility, left ventricular, conscious rabbit, 7  
 Coronary arterial calcification, physical chemical evidence of structural weakness, 64  
 — arteries fixed at distending pressure, measurements from light and polarised light microscopy, 973  
 — artery disease, platelet hyperreactivity and inefficient spontaneous thrombolysis, 567  
 — — — ligation, time course of functional deterioration after, rats, 649  
 — — — occlusion and reperfusion, myocardial changes, dog, 417  
 — — — ventricular vulnerability, and fentanyl and buprenorphine, 1001  
 — blood flow, variability of measurements with microspheres, rat, role of injection site and sphere number, 443  
 — — — and purine release, relationship between, in isolated rat heart, and the adenosine hypothesis, 125  
 Cryothermal mapping of sinus node, dogs, in localising pacemakers, 231  
 Cultured cardiac cells, high energy phosphate in, 254  
 Cusp derived fibroblasts, heart valve, antifungal effects on viability, 1058  
 Cyclic adenosine monophosphate levels, and platelet function, effects of chronic treatment with adrenaline or propranolol, rat, 112  
 — — — production, adrenaline induced, calcium modulates, 838
- D**
- Desethylamiodarone, and amiodarone, effects on arrhythmias, 331  
 Deterioration, functional, time course after coronary artery ligation, rats, 649  
 Diabetes, effect on metabolic coronary dilatation, rat, 40  
 Diastolic depolarisation, barium induced, in isolated ventricular myocytes, mechanism, 390  
 Digital image processing study of effect of flunarizine and intracellular calcium on cardiomyocytes, rat, 797  
 Diltiazem hydrochloride, effects on alternans of ST segment, 520  
 2, 4-Dinitrophenol induced current changes, glucose reversal, 286  
 Doppler assessment of flow, Carpentier-Edwards mitral prostheses, 1007  
 — echocardiography, pulsed, in effects of atrioventricular interval on left ventricular diastolic filling, 1034  
 Doxazosin induced vasodilatation during reperfusion, 934  
 Dyskinesia reversal by increased end diastolic segment length in ischaemic-reperfused myocardium, 810
- E**
- Echovonography, M-mode, new technique for evaluation of venous wall and valve motion, 25  
 Electrophysiological effects of acute ischaemia on electrically stable myocardial infarction, 169  
 Embolisation, coronary, myocardial stiffness and reparative fibrosis following, rat, 655  
 End tidal carbon dioxide as haemodynamic determinant of cardiopulmonary resuscitation, rat, 364  
 Endocardial injury and pathogenesis of mural thrombosis, left ventricle, 478  
 Endomyocardial fibrosis, geochemical basis for: rapid communication, 647  
 Endothelial cells, adenylate cyclase activation by calcitonin gene related peptide, 921  
 — — — production of superoxide radicals, umbilical vein, 76  
 — — — dependent control of arterial diameter by blood viscosity, 741  
 — — — dilatation mediated by nitric oxide synthesised from L-arginine, 1053  
 $\beta$ -Enolase isoenzymes blood plasma during open heart surgery, 737  
 Enzymes in cardiovascular tissue, which release a substance with kinin like activity, 91  
 Ethanol feeding and synthesis of subcellular protein fractions, rat heart, 730  
 Exercise, dynamic, sympathoadrenal response, after heart transplantation, 965
- F**
- Fentanyl and buprenorphine, compared for effects on ventricular vulnerability during acute coronary artery occlusion, 1001  
 Fibroblasts, cusp derived, heart valve, antifungal effects on viability, 1058  
 Fibrosis, reparative, and myocardial stiffness, following coronary embolisation, rat, 655  
 Fish oil, effects on arteriosclerosis, Japanese quail, 631  
 FK664, new cardiotonic agent, electrophysiological effects on preparations from guinea pig ventricle and rabbit sino-atrial node, 369  
 Flecainide, electrophysiological effects in myocardial infarction, dog, 177  
 Flow distribution in right ventricular circulation, open chest, dogs, 31  
 Flunarizine effect on intracellular calcium in cardiomyocytes, digital image processing study, rat, 797  
 Forskolin potentiates myocardial reactive hyperaemia, open chest, dog, 104  
 Free radicals and cardioplegia, organic anti-oxidants as additives to St Thomas' Hospital cardioplegic solution, 351  
 — — — and neutrophils in myocardial reperfusion injury, salvage by 2-octadecylascorbic acid, dog, 323
- G**
- Glucose reverses 2,4-dinitrophenol induced current changes, 286  
 Glutathione peroxidase and adriamycin toxicity, 498  
 — — — in prevention of peroxidation to the heart, 774  
 Growth, and collagen accumulation in heart ventricles, 723  
 — normal, and pressure induced hypertrophy, myocardial changes, comparison, rat heart, 308

## H

- Haemodilution, circulatory effects, after myocardial infarction, 842
- Haemodynamics, percutaneous ventricular puncture for evaluation, anaesthetised rats, 21
- Head up tilt during extrauterine life, cardiac responses, 460
- Heart cell cultures, cell numbers, quantitation, 928
- failure, vascular smooth muscle, 489
- rate, ratio of cardiopulmonary blood volume to stroke volume, sheep, 453
- Heart transplantation, heterotopic, sodium nuclear magnetic resonance imaging in acute cardiac rejection, 561
- valve allografts, detachment, 709
- tissue, effects of antibiotics on cellular viability, pigs, 960
- High energy phosphate *see* Phosphates
- Hydrogen peroxide effects on action potentials and intracellular  $Ca^{2+}$  concentration, guinea pig heart, 767
- Hypercholesterolaemia, blood pressure and thromboxane  $A_2$  release, 788
- Hypertension, borderline systemic, pulmonary vasoconstrictor overactivity, 666
- effects of chronic sodium depletion, rat, 432
- Hypertrophy, cardiac, with pressure overload,  $\alpha_1$ -adrenoceptor activity role in progression, guinea pig hearts, 315
- pressure induced, and normal growth, myocardial changes, comparison, rat heart, 308
- Hypodynamic endotoxin shock, effect on myocardial high energy phosphates, rat, 200
- Hypoxia, cardiorespiratory dynamics, exercise tests, 825

## I

- Infarction, potassium and sodium-calcium exchange currents in Purkinje fibres, 410
- Inosine uptake by human heart, 484
- Inotropic interventions on tension and shortening in isolated ferret ventricular muscle, 748
- Instructions to authors, 1
- Ischaemia, increase and beta-adrenoceptors after, dog, 424
- *see also* Myocardial ischaemia
- Ischaemic forearm test, theophylline decreases pain, 807
- Isoenzymes in infarcting myocardium, 249
- Isoprenaline induced changes in ornithine decarboxylase activity and polyamine content in regions of rat heart, 611

## K

- Kinin-like activity, enzymes releasing substance with, 91

## L

- Lactate dehydrogenase, its isoenzyme activities, in different parts of normal human heart, 601
- Left ventricular pressure-diameter relations, conscious rabbit, 7
- L-arginine analogue  $N^G$ -monomethyl L-arginine (L-NMMA) *see* L-NMMA
- Lipid peroxidation, increased, evidence in non-ischaemic portion of heart with coronary occlusion, 98
- L-NMMA blocks nitric acid release in human veins, 1053
- Left ventricular diastolic filling, effect of atrioventricular interval, Doppler echocardiography assessment, 1034
- Long QT syndrome, caesium chloride injection effects, 756
- Lyso derivative of platelet activating factor in myocardial infarction and unstable angina, 273

## M

- Magnetic resonance imaging, sodium, of cardiac rejection, 561
- spectroscopy, phosphorus-31, in transmural distribution of phosphorus metabolites, pig heart, 1015

- MCI-176, new calcium channel blocker, effect on large and small coronary arteries, dogs, 295
- Mechano-electric coupling, effect on monophasic action potential, and segment length, pig heart, 887
- Met-enkephalin, cardiorespiratory effects in rat brain, 904
- Metabolic coronary dilatation, effect of diabetes, rat, 40
- Metoprolol combined with ribose, functional and metabolic effects, rats, 702
- Mexiletine-quinidine in isolated hearts, an interaction involving the sodium channel, 584
- Micro-embolisation, increase in beta-adrenoceptors, dog, 424
- Micromanometer tipped catheter, intravascular, unpredictable zero drift, during long term pulmonary artery pressure recording, 152
- Microspheres, coronary blood flow measurements, variability, role of injection site and sphere number, rat, 443
- Milk clotting and thrombosis, role of stasis and prosthetic heart valve, 949
- Milrinone, effects in cardiomyopathic hamsters (CHF 147) with severe congestive heart failure, 620
- Mitotic response of arteries to injury with balloon catheter, rat thoracic aorta, 941
- M-mode echovenography, new technique for evaluation of venous wall and valve motion, 25
- Monophasic action potential and segment length, effect of changes in load, pig heart, 887
- Muscle protein transformation, variable adaptation of molecular mechanisms: review, 593
- Myocardial changes, comparison between pressure induced hypertrophy and normal growth, rat heart, 308
- fibrillation, computer simulation, using one dimensional model of excitation and recovery processes, 132
- infarction, acute anterior, right ventricular relaxation changes during, pigs, 46
- — beta adrenoceptor density after, rat heart, 859
- — disappearance and appearance of isoenzymes, 249
- — electrophysiological effects of flecainide, dog, 177
- — haemodilution, circulatory effects after, 842
- — high frequency QRS potentials, clinical significance, 60
- — and unstable angina, whole blood aggregation, thromboxane release and lyso derivative of platelet activating factor, 273
- ion contents, changes during reperfusion and effects on arrhythmias, 993
- ischaemia, acute, electrophysiological effects on electrically stable myocardial infarction, 169
- — anti-arrhythmic effects, 81
- — effects of heart rate and diltiazem hydrochloride on alternans of ST segment and ventricular arrhythmia, 520
- — effect of reserpine and guanethidine on carbohydrate metabolism, rat, 385
- metabolism, noradrenaline in, rat, 385
- microvascular utilisation and flow during atrial pacing, 1027
- reactive hyperaemia, forskolin potentiates, open chest dog, 104
- stiffness and reparative fibrosis following coronary embolisation, rat, 655
- surface  $PO_2$  as an indicator of myocardial tissue oxygenation, 529
- Myocardium, porcine, apparent lack of beta<sub>2</sub> adrenergic receptors, 577
- Myocytes, effects of strophanthidin on morphology, guinea pig, 378

## N

- Neural circulatory control, non-invasive method for testing, man, 262
- Neurotensin in myocardium and blood in congestive cardiac failure, rats, 674

$N^G$ -monomethyl L-arginine *see* L-NMMA

Nitric oxide synthesised from L-arginine mediates endothelium dependent dilatation in human veins *in vivo*, 1053

Noradrenaline, effect on ability of papillary muscle to resist acute respiratory acidosis, rat, 607

— in myocardial metabolism, rat, 385

— in myocardium and blood in congestive cardiac failure, rats, 674

Notices, 80, 176, 272, 368

Nystatin, effect on viable heart valve cusp derived fibroblasts, 1058

## O

2-Octadecylascorbic acid, free radical scavenger in myocardial reperfusion injury, dog, 323

Open heart surgery,  $\beta$ -enolase isoenzymes in blood plasma during, 737

Opiates, effects during baroreceptor and ergoreceptor induced changes in blood pressure, 191

Opioids and ventricular vulnerability, 1001

Oxygen consumption and local and external work, effect of tachycardia, 1043

— and extracellular fluid restrictions in cultured heart cells, high energy phosphate metabolism, 254

Oxygenation, myocardial tissue, myocardial surface  $P_{O_2}$  as an indicator, 529

Oxypurinol pretreatment, beneficial effects in stunned, reperfused canine myocardium, 340

## P

Pacemaker potential and barium, 390

Pacing, atrial, increased myocardial microvascular utilisation and flow during, 1027

Palmitylcarnitine induced arrhythmias, mechanism, guinea pig papillary muscle, 505

Parasympathetic inhibition, apparent, mechanism, adenosine induced heart rate, slowing, dog, 239

Percutaneous ventricular puncture for cardiac haemodynamic evaluation, anaesthetised rats, 21

Perindopril inhibition of angiotensin converting enzyme, and action potential in infarcted hearts, rat, 224

Peroxidation, glutathione peroxidase and catalase in prevention, 774

Phosphates, high energy, in cultured cardiac cells, 254

— myocardial high energy, effect of hypodynamic endotoxin shock, rat, 200

Phosphorus-31 magnetic resonance spectroscopy, in transmural distribution of phosphorus metabolites, pig heart, 1015

Pimobendan, inhibition of platelet aggregation by, 184

Platelets, activating factor, involvement in anaphylaxis of passively sensitised, isolated guinea pig hearts, 715

— aggregation inhibitory effects of new positive inotropic agents pimobendan and UD CG 212 in whole blood, 184

— function and cyclic adenosine monophosphate levels, effects of chronic treatment with adrenaline or propranolol, rat, 112

— thrombolysis and cardiac risk, 567

Polarised light microscopy, measurements of coronary arteries fixed at distending pressure, 973

Posture, erect, acquisition by infants, cardiac responses, 460

Potassium and sodium-calcium exchange currents in Purkinje fibres surviving infarction, 410

Prazosin combined with ribose, functional and metabolic effects, rats, 702

— effects of long term administration on microcirculation in skeletal muscles, 913

Premature ventricular contractions and reflex sympathetic activation, cats, 205

Pressure overload model, murine, of congestive heart failure, surface electrocardiogram as means of refining: correspondence, 560

Propranolol, effects of chronic treatment on platelet function and cyclic adenosine monophosphate levels, rats, 112

— effects on myocardial damage, dog, 417

Prosthetic heart valves, role of stasis in clotting of blood and milk flows, 949

Protein fractions, subcellular, synthesis and ethanol feeding, rat heart, 730

Proteinases, cardiovascular, and active peptides, 91

Pulmonary artery pressure recording, long term, unpredictable zero drift in micromanometer tipped catheters during, 152

— vasoconstrictor overreactivity, borderline systemic hypertension, 666

Purine release and coronary flow, relationship between, in isolated rat heart, and the adenosine hypothesis, 125

Purkinje fibres, cardiac, and strontium, electrical and mechanical effects, sheep, 867

— — ischaemic, and class III anti-arrhythmics, 554

— — surviving infarction, potassium and sodium-calcium exchange currents, 410

## Q

QRS potentials, high frequency, in myocardial infarction, clinical significance, 60

## R

Redox state in vasoconstriction induced by adrenaline and serotonin, 662

Regression, equations, compiled using RR interval for systolic time interval measurement correction, sheep, 359

Renal arterial bed, specific frequency properties, rat 465

Reperfusion, doxazosin induced vasodilatation during, 934

— induced arrhythmias, extracellular sodium effects, 993

— — and increases in ventricular  $\alpha_1$  receptor density, dissociation between, anaesthetised rat, 852

— myocardial changes, dog, 417

Repolarisation, terminal atrial myocardial, prediction from incomplete phase 3 data, 53

— ventricular, and refractory period, chronic measurements, animal study, 16

Respiration and left ventricular function, 683

Respiratory acidosis, acute, effect of noradrenaline on ability of papillary muscle to resist, rat, 607

Ribose in combination with prazosin, verapamil and metoprolol, functional and metabolic effects, rats, 702

Right ventricular circulation, flow distribution, open chest dogs, 31

RR interval for systolic time interval measurement correction, regression equations compiled using, sheep, 359

## S

SC-40230, new anti-arrhythmic agent, cardiovascular profile, 897

Serotonin and acetylcholine compared, effects on coronary arteries, 780

— and induction of redox state in vasoconstriction, 662

— responses, and atherosclerosis, 117

Shock, hypodynamic endotoxin, effect on myocardial high energy phosphates, rat, 200

Sinus node, cryothermal mapping, dogs, in localising pacemakers, 231

Sodium depletion, chronic, effect on function of isolated normal and hypertensive hypertrophied rat heart, 432

— extracellular, effects on reperfusion induced arrhythmias, 993

— nuclear magnetic resonance imaging of acute cardiac rejection in heterotopic heart transplantation, 561

- Solute transfer into extravascular space, two non-invasive measurement techniques compared, 639
- St Thomas' Hospital cardioplegic solution, organic anti-oxidants as additives, 351
- Standardised exercise test, time course of functional deterioration after coronary artery ligation, rats, 649
- Stasis role in clotting of blood and milk, and prosthetic heart valves, 949
- Striated muscle, variable adaptation of molecular mechanisms: review, 593
- Strontium in cardiac Purkinje fibres, electrical and mechanical effects, sheep, 867
- Strophanthidin, effects on intracellular  $Ca^{2+}$  concentration and cellular morphology, guinea pig myocytes, 378
- Superior mesenteric arterial bed, specific frequency properties, rat, 465
- Superoxide radicals, endothelial cell production, umbilical vein, 76
- Sympathectomy, chemical, inability to induce coronary collateral growth or development, rat, 820
- Sympathetic activation, reflex, and premature ventricular contractions, cats, 205
- Sympathoadrenal response to dynamic exercise, after heart transplantation, 965
- Systemic time interval measurement correction, regression equations compiled using RR interval for, sheep, 359

## T

- Tachycardia, effect on oxygen consumption and local and external cardiac work, 1043
- $^{99m}Tc$  DTPA clearance from intravascular to extravascular space, 639
- Technetium,  $^{99m}$ , DTPA, capillary permeability in canine myocardium, 512
- Theophylline decreases pain in ischaemic forearm test, 807
- Thrombogenic potential of endocardial damage, 478
- Thrombolysis, platelets and cardiac risk, 567
- Thromboxane  $A_2$  release in hypercholesterolaemia, 788
- release of platelet activating factor in myocardial infarction and unstable angina, 273
- Transplantation, heart, altered sympathoadrenal response to dynamic exercise after, 965

## U

- UD CG 212, inhibition of platelet aggregation by, 184
- Unstable angina, and myocardial infarction, whole blood aggregation, thromboxane release, and lysoderivative of platelet activating factor, 273

## V

- Vascular smooth muscle responsiveness to noradrenaline and phenylephrine following experimental heart failure, dog, 489
- Vasoconstriction, induced by adrenaline and serotonin, redox state, 662
- Vasodilatation, doxazosin induced, during reperfusion, 934
- Venous wall and valve motion, M-mode echovenography, new evaluation technique, 25
- Ventricular hypertrophy, verapamil induced, conscious dogs, 695
- interdependence, contribution to transient changes in ventricular function with respiratory efforts, model studies, 683
- muscle, isometric tension and shortening, inotropic interventions, 748
- myocytes, isolated, barium induced diastolic depolarisation, mechanism, 390
- repolarisation and refractory period, chronic measurements, animal study, 16
- vulnerability and opioids, 1001
- Verapamil combined with ribose, functional and metabolic effects, rats, 702
- induced ventricular hypertrophy, conscious dogs, 695

## W

- Whole blood aggregation of platelet activating factor in myocardial infarction and unstable angina, 273

## X

- Xenografts, detachment, 709

## Z

- Zero drift, unpredictable, in intravascular micromanometer tipped catheters during long term pulmonary artery pressure recording, 152